

SAN JOSE - SUSTAINABLE CITY STATUS REPORT JUNE 1998

EXECUTIVE SUMMARY

In August of 1994, San Jose's City Council adopted San Jose 2020 as its general plan. Included within the plan was a new Strategy entitled the "Sustainable City Major Strategy." The Sustainable City Major Strategy is a statement of San Jose's desire to become an environmentally and economically sustainable city. A "sustainable city" is a city designed, constructed, and operated to efficiently use its natural resources, minimize waste, and to manage and conserve them for the use of present and future generations.

The City of San Jose is working to become an environmentally and economically sustainable city, one characterized by responsive and efficient policies and programs, and by successful public-private partnerships. The City's Sustainable City Major Strategy and environmental policies and programs are based on the premise that natural resources are not inexhaustible commodities to be exploited but are limited assets which should be wisely managed for the benefit of present and future generations. By planning for urban sustainability, the City of San Jose aims to promote resource efficient land use, transportation, energy and water use, and resource conservation.

San Jose's Sustainable City Status Report

In 1980, a report was prepared for City Council that identified public policy issues in natural resource management, and presented recommendations for directions for the City to take that would improve the efficiency and economy of the City's and the community's handling and use of these resources. Entitled "Toward a Sustainable City", this report, and the subsequent actions taken by City Council to implement some of these recommendations, laid the groundwork for the efforts, successes, and lessons learned, within our City.

The adoption of that report by the City Council began what is now almost a seventeen-year journey towards becoming a Sustainable City. A journey that was built on the major sources of power held by a City government to shape its environment. These sources included resource decisions on Energy Systems, Land Use Patterns, Communication, Transportation, Water Systems and Waste Systems.

The City of San Jose has used a broad array of policy, fiscal, administrative and program tools to create and maintain its sustainability initiatives. Examples abound throughout the city departments and offices, from watershed management, economic development, to community education and environmental compliance and legislative advocacy. This report presents a status on the policies and programs that contribute to San Jose as a Sustainable City. This report is an initial documentation of the City's programs, policies and activities that contribute to San Jose as a Sustainable City. The City should be proud of the variety of programs that have been initiated and supported within the city departments and the community.

Achievements of Environmental Programs

The following represents just a few of the achievements of the City's programs that support the Sustainable City Major Strategy.

- Jobs/housing balance and transit oriented development policies within the General Plan improve energy efficiency and air quality by reducing traffic congestion, shortening trip lengths and increasing the availability and convenience of alternate modes of transportation.
- The Intensification Corridors Special Strategy will promote vigorous economic growth by allowing more intensive commercial and industrial development on scarce land particularly in northern and central San Jose.
- Implementation of the Riparian Corridor Policy Study will help preserve the existing, limited wildlife habitat within the City and preserve an open space and recreational resource.
- In 1997 the San Jose/Santa Clara Water Pollution Control Plant treated over 50 billion gallons (139 mgd) of wastewater, and removed over 94 million pounds of solids (258,600 lb/day) and 88 million pounds of BOD (257,000 lb/day).
- By the close of fiscal year 96/97, the City's water efficiency programs had achieved the flow reduction goal of 15 mgd from the 1986 conservation plan and 1991 Action Plan. More than 5 mgd of this reduction was completed during the last three years of that period and occurred during a time of tremendous regional growth. Water use rates continue to remain below baseline levels in 1987.
- The Recycle Plus program met all of the California AB 939 requirements in 1995 and is currently well on its way to meeting the 2000 goal of 50%. In 1996 recycling was at 44% for the City as a whole.
- The new Recycle-At-Work program has resulted in a reduction of garbage service needs by half at City Hall and the Police Administration Building, thereby reducing the amount of garbage sent to the landfill by 60 cubic yards per week
- The City's policy to purchase recycled products saves the city \$10,000 a year just from recycling of laser-printer toner cartridges. Each ton of recycled paper saves 4,200 kWh of electricity, 17 trees, and 7,000 gallons of water. On a yearly basis, by purchasing recycled paper the city avoids the emission of 6,300 lbs. of CO₂, 10,500 lbs. NO_x, and 24,360 lbs. SO₂.
- A municipal cost avoidance of approximately \$3 plus million per year in utility expenditures occurs as a result of the projects completed since the initiation of the energy efficiency projects. Annual bill savings of approximately \$315,000 by General Services have been accomplished in existing facilities by conserving 3.5 million kWh and 300,000 therms of natural gas per year.
- The Traffic Signal Management Project is estimated to reduce vehicle operating costs by \$25 million annually. This effectively reduces the estimated fuel usage by 7.5 million gallons, resulting in a reduction in the emission of carbon monoxide (1,700 tons/year), hydrocarbons (115 tons/year), and nitrous oxide (130 tons/year). The estimated reduction in stops and delays is estimated at 16 percent.

Future Opportunities

Making continued progress towards sustainability will require a systematic evaluation of whether our actions and strategies are adequate and whether they are having the desired effect. The opportunities exist to engage the community in a dialogue about our progress to date, an

evaluation of our policies and programs, and the identification of next steps in the process. Preliminary meetings within the community have resulted in the identification of next steps on the path toward sustainability for San Jose. Those next steps include the establishment of a community process that would identify issues, develop goals and establish priorities. San Jose residents were also interested in the establishment of methods and tools, such as Sustainability indicators, that would measure the performance of the community as a whole in achieving its goals and targets.

Promoting A Community Dialogue on Sustainability for San Jose

Involving the community in the analysis of development and related service issues is essential to the optimal solution of problems. Municipal investments are more likely to succeed and win public support if they are responsive to the articulated needs, concerns, and preferences of the communities. City strategies can also benefit from the knowledge and resources that local residents and institutions can themselves contribute to solving problems. At the same time, the process of issue analysis can be used to educate stakeholders about technical conditions and constraints for service delivery, such as ecosystem carrying capacities or financial constraints.

Establishing Sustainable Indicators

The well being of a community or nation can be measured in many ways. Traditional measurements often analyze a single issue by itself, such as the number of new jobs in a particular community. New measurements called "Indicators of Sustainability" are designed to provide information for understanding and enhancing the relationships between the economic, energy use, environmental, and social elements inherent in long-term sustainability.

Indicators serve as valuable tools for profiling local energy consumption patterns as a sustainability benchmark. Communities such as Seattle, San Francisco, and Toronto are using indicators to gather and evaluate information on both current energy use and future alternatives for the residential, commercial, industrial and transportation sectors. This information is vital in planning for and managing the energy resources that will support sustainable development.

The role of an indicator is to make complex systems understandable or perceptible. An effective indicator or set of indicators helps a community determine where it is, where it is going, and how far it is from chosen goals. Indicators of Sustainability examine a community's long-term viability based on the degree to which its economic, environmental, and social systems are efficient and integrated.

Integrated Waste Management Opportunities

Waste management technologies have developed rapidly during the '90's. Lead by European initiatives with the world's most stringent waste reduction programs, technologies now exist to drastically improve the City's input to waste disposal sites.

Waste Processing

The collection of solid waste tends to be the dominant portion of waste management program costs. Complex waste sorting schemes require specialized collection equipment and more time on the street for that equipment. In many locations, minimal source separation combined with material processing is achieving the best combination of low program cost and high diversion rate. San Jose's residential waste collection program is in the position to take advantage of this by separating its waste collection and waste processing contracts. Waste collection contracts can be used to define the most efficient and lowest cost material sorting specification that perfectly integrate with its contracted processing capacity.

ESD/IWM is reviewing a system of fee collection that creates economic incentives for haulers to take advantage of processing. Under this concept, loads of material taken to a recovery processing/recovery facility would receive a discount on City fees owed based on the recovery rate of the processor. Such a system has the potential to continuously increase the level of material diversion from the economic incentives available to haulers and processors. This only occurs when there is an open market for processing capacity. This open market is currently not in place and may require direct action by the City to create it.

The movement toward developing adequate waste processing capacity must be addressed as part of the City's master plan. As land development continues in San Jose, there are fewer and fewer sites left that are appropriate for processor siting. The City will need to move soon to secure locations for future development of processing capacity. Failing to do so may ultimately leave the City in a position of having to export waste materials to other locations for processing or disposal. Dependence on such outside sources of vital services does not support the City's sustainability.

Working with the Bay Area Alliance for Sustainable Development

The President's Council for Sustainable Development (PCSD) was established in June 1993 to develop a national strategy for meeting the needs of the present without compromising the opportunities of future generations. Councilmembers included leaders from government, business, environmental, civil rights, labor and Native American organizations. For three years, the Council held public meetings at locations around the country, including here in the Bay area. Several of San Jose's Councilmembers were able to make presentations to the Council at the bay area meeting.

One of the implementation recommendations from the President's Council (PCSD) is to assist in the development of regional councils as a way to strengthen communities and enhance their role in decisions about environment, equity, natural resources and economic progress.

The Bay Area Alliance for Sustainable Development (Alliance) is a multi-stakeholder coalition which will develop and implement an action plan that will lead to a more sustainable Bay Area in the future – a Bay area where the economy continues to prosper, where environmental quality is improved and where citizens have the opportunity to share in the benefits of a quality environment and prosperous economy.

The Alliance has a leadership team representing the business, environmental, governmental and social equity sectors. The Alliance believes it may serve as a model for other communities throughout the nation because of the economic, social and environmental diversity of the Bay Area, and recognizes that its success will depend on unprecedented levels of inter-sectoral and inter-jurisdictional cooperation and collaboration.

Green Building Opportunities

Green building programs are designed to promote building practices that minimize the negative environmental impacts associated with construction. They also seek to reduce the operational impacts associated with a building's continued consumption of resources. Green building programs address: energy, water conservation, building materials, indoor air quality, solid waste management and site impacts. Green building programs strive to develop and implement a comprehensive view of design and construction practices and assess their overall environmental impacts. This requires an integrated design approach where there is communication between all those involved in the process.

There are many Green Building Programs across the country that seek to minimize the environmental impacts and make buildings as efficient as possible. They have been started by local governments, Home Builders' Associations and Utilities, and other non-profit organizations.

The City of San Jose - Environmental Services Department will be holding a "Green Building Dialogue" on July 2, 1998. We anticipate up to twenty to thirty key stakeholders concerned with building issues to be invited to this dialogue.

The workshop would give participants the opportunity to determine if there is any further interest in developing a Green Building Program within the Silicon Valley area, to identify any opportunities to incorporate green building techniques and materials within proposed buildings and developments, and to identify additional information opportunities such as the establishment of an area "green building network" or coordinating a green building trade show/fair to provide more information to area builders, developers and educators.

Summary

San Jose has begun on the path to become a Sustainable City. This report provides a broad overview of how the City of San Jose is moving down the path towards sustainability. Embarking on the path toward sustainability has taken, and will continue to take the commitment of our elected officials, staff innovation and dedication, ongoing evaluation and research, community partnerships and public education and involvement.